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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/785,033 02/25/2004 Yutaka Soda SON-2289/DIV 9055 23353 7590 07/26/2004 **EXAMINER** RADER FISHMAN & GRAUER PLLC MILLER, BRIAN E LION BUILDING ART UNIT PAPER NUMBER 1233 20TH STREET N.W., SUITE 501 WASHINGTON, DC 20036 2652

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | |
|--|---|---|--------------|--|
| , | 0.00 | 10/785,033 | SODA ET AL. | |
| | Office Action Summary | Examiner | Art Unit | |
| | | Brian E. Miller | 2652 | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | |
| Status St | | | | |
| 1)⊠ | Responsive to communication(s) filed on 25 | February 2004. | | |
| 2a)□ | This action is FINAL . 2b)⊠ Th | is action is non-final. | | |
| 3)□ | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | |
| Disposition of Claims | | | | |
| 4) Claim(s) 10-18 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 10-18 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) is/are objected to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 10/013,859. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | |
| APAT ALIANDE AANI | | | | |
| Attachment(s) BEST AVAILABLE COPY | | | | |
| 2) 🔲 Notic 3) 🔲 Inforr | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 r No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other: | | |

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Claims 10-18 are now pending.

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/013,859, filed on 12/13/01.

Claim Objections

2. Claims 12 & 16 are objected to because of the following informalities: the phrase "connected to the ground" should be changed to "connected to a ground potential" or similar language for clarity. Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 5. Claims 10-12, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKee (US 3,585,446). McKee discloses a structure utilized on motion picture reels to reduce

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electro-static buildup on the hubs/reels, as shown in the FIG., including a conductive coating 22 provided on the support shaft 18 of the reel 10. As shown in the FIG., the charge(s) migrate to the conductive coating and to the metallic shaft (as shown by successive arrows 38, 40, 42, 44), which is then dissipated to ground via the frame (see col. 2, lines 51-61). While the above disclosure is directed to motion picture reel(s), it would have been readily apparent to a skilled artisan, that as magnetic tape devices suffer similarly from electro-static buildup, providing the conductive coating in the reel support area as taught by McKee into a magnetic recording/playback device would have been obvious. The motivation would have been: reduction of electro-static buildup on a rotating medium in magnetic recording/playback devices, similar to motion picture reels, would prevent unwanted noise into the recording/reproduction signals in the device (see also col. 1, lines 19-33 of McKee).

With respect to a magneto-resistive (MR) head being provided in the magnetic playback device, Official Notice is taken that the use of MR heads in magnetic devices, including tape players, are notoriously old and well known in this art and providing such in the structure as discussed above, would have been obvious to a skilled artisan. The motivation would have been: MR heads as a playback head are known to provide high quality output signals and are thus are very important and readily utilized in this art, as was conventionally known.

6. Claims 13-14, 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKee in view of Niimi et al (US 6,146,753). For a description of McKee, see the rejection, supra. As per the above claims, McKee is silent as to the specific conductive coating material, i.e., made of metal and/or having a surface resistance ranging from 0 to 10¹² ohms/inch².

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Niimi et al discloses in the art of antistatic coatings, a coating 5 that includes a conductive layer 2 having a surface resistivity of not more than 10¹² ohms/inch² that includes, for example, a metal (see col. 3, lines 37-39, col. 4, lines 39-54). It would have been obvious to have utilized the conductive film as taught by Niimi et al, into the structure of McKee. The motivation would have been: as there was a plethora of antistatic films encompassed by the claimed metal film and/or surface-resistance, the coating as disclosed by Niimi would have provided sufficient antistatic properties to prevent antistatic buildup on the reel(s) and associated components of the McKee structure. It is noted that numerous other films having the aforementioned properties would have been readily acceptable and provided for by a skilled artisan in this art as needed.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure including US Patents to Jager et al (4,509,087), Collins (4,607,808), and Rudi et al (5,475,548) which are cited to show anti-static configurations for magnetic tape devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E. Miller whose telephone number is (703) 308-2850. The examiner can normally be reached on M-TH 7:15am-4:45pm (and every other friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian E. Miller

Primary Examiner

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Bem

July 20, 2004